

Design Workout #2: Task Analysis

Task: Using my iPhone, take a picture and send it to your self in a text/MMS message

Subject 1: Adult Male, 62 years of age

Background: My first subject was experienced with smartphones, he owned a Blackberry, but had never operated an iPhone.

Description: The subject navigated to the Photos app, and realized it was not the correct app, so he exited. He had trouble finding the Camera app on the home screen (see Figure 1). This continued for a few minutes, he inquired and asked me if the Camera app was on the home screen, I replied that it was.

He eventually was able to locate the Camera app (Figure 2) and took a picture by accident. He attempted to take another one, and accidentally took multiple pictures. He did not recognize that the pictures were being taken, presumably because the pictures are taken so quickly. Once he had a picture he was satisfied with, he accidentally navigated back to the home screen.

He had difficulty finding the Camera app again and spent a few moments trying to figure out how to find the picture he just took. He opened the Camera app again and then saw the picture icon in the

bottom left of the screen and tapped on it. Once the photo was displayed, he had difficulty figuring out what to do with the photo. He tapped on it (Figure 3), and pressed the Delete button by accident (Figure 4), then he hit Cancel. Then he found the Send function and tapped "MMS." At first he was unable to find how to enter the recipient. Once he figured out he need to start typing the name, he had difficulty finding the backspace button. As he was typing he did not see that his name was being displayed beneath the area in which he was typing as a sort of auto-complete function, so he kept typing. He finished typing his name and clicked Send. He was very satisfied after completing the task.

Subject 2: Male college student, 21

Background: My second subject was an experienced iPhone user, although he did not own an iPhone at the time of the experiment.

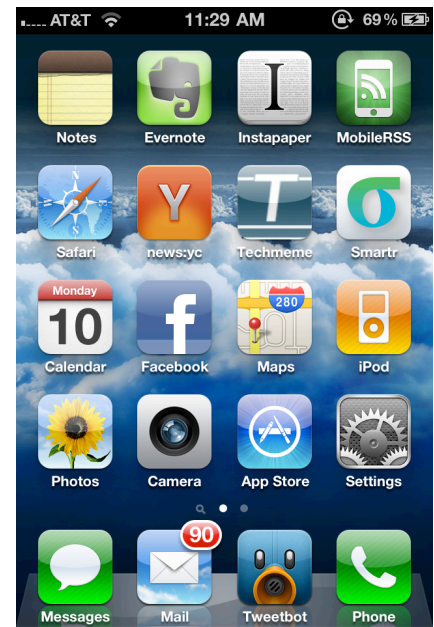


Figure 1

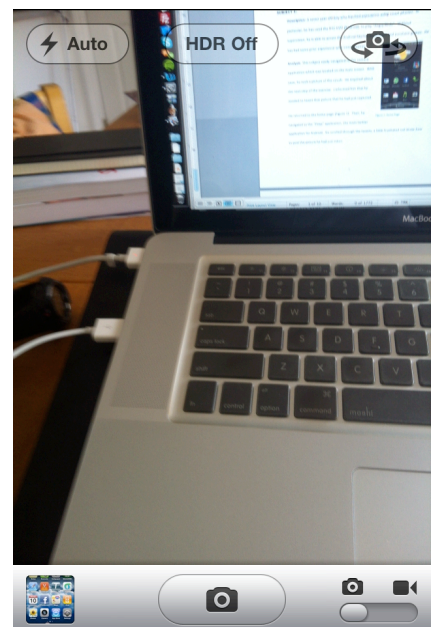


Figure 2

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October 10, 2011
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Description: The subject looked at the home screen and tapped the Camera icon without hesitation. He then quickly took a picture of his friend who was sitting in the room. He did not like the first picture so he took a second picture. He tapped the photo he had just taken from the Camera screen and tapped the Share button. He then tapped on MMS and typed in his name. Finally, he clicked send.

Opened the camera application immediately, took a picture, clicked the picture and clicked the share button, clicked mms, typed his name in, and clicked send.

Subject 3: Female child, 8 years of age

Background: The third subject was an experienced iPod touch user, so she was familiar with iOS. She often uses her iPod to play games and listen to music.

Note: I altered the task a bit since the third subject did not have a cell phone, I instructed her to send the picture she takes to her mother.

Description: The subject quickly found the Camera app, because of the icon (she mentioned her iPod touch did not have a camera). She took a picture without any hesitation. She then asked what she was supposed to do with the picture, I reminded her she needed to send it to her mother. She asked how to do that. I instructed her to find the photo she just took and send it in a type of text message called "MMS." She told me she knows what text messages are but isn't sure about MMS. She was confused, but continued the task and tried to find the photo she just took. She knew she would find it in the Photo app, since she's seen this app on her iPod touch. She navigated to the picture she had just taken, but did not know what to do next. She tapped the picture a few times and saw options appear, but kept tapping the screen so the options would disappear. Finally she was able to view the options and tapped on the share button. She saw one of the options was MMS, so she clicked it and said "Cool! I'm texting Mommy my picture!" I laughed. She saw the "To" field and started typing her mother's phone number, rather than looking for her name. She finished typing the phone number and found the send button and tapped it. She was very satisfied after the completing the task.

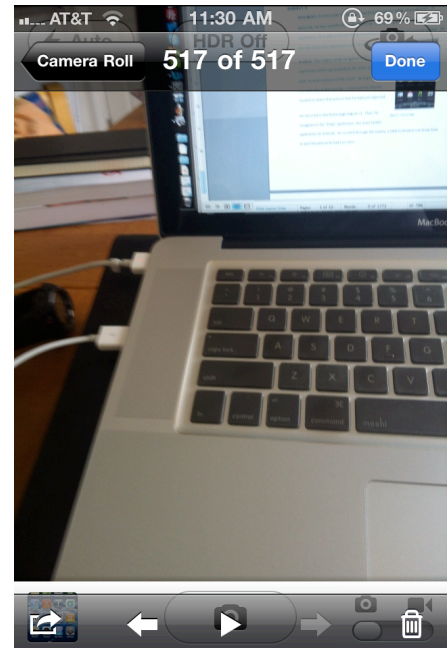


Figure 3

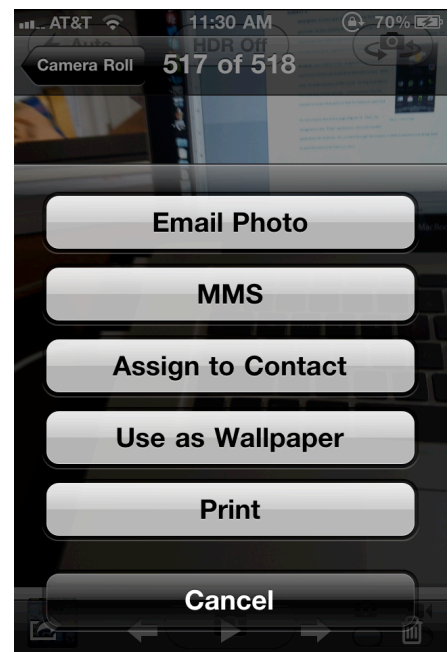


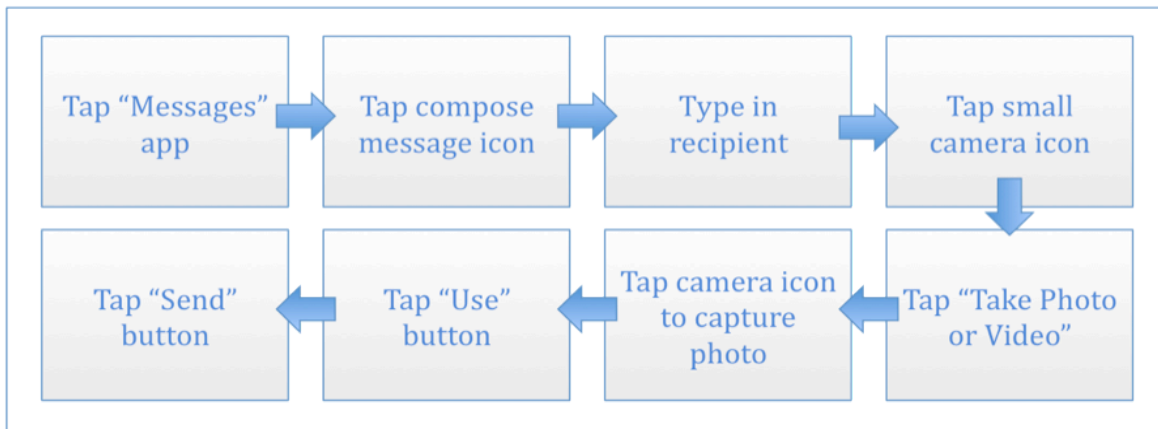
Figure 4

Task Decomposition:

Plan 0:

1. Tap "Messages" application.
2. Tap compose message icon.
3. Type in recipient.
4. Tap small camera icon.
5. Tap "Take Photo or Video"
6. Tap camera icon to capture photo
7. Tap "use" button.
8. Tap "send" button.

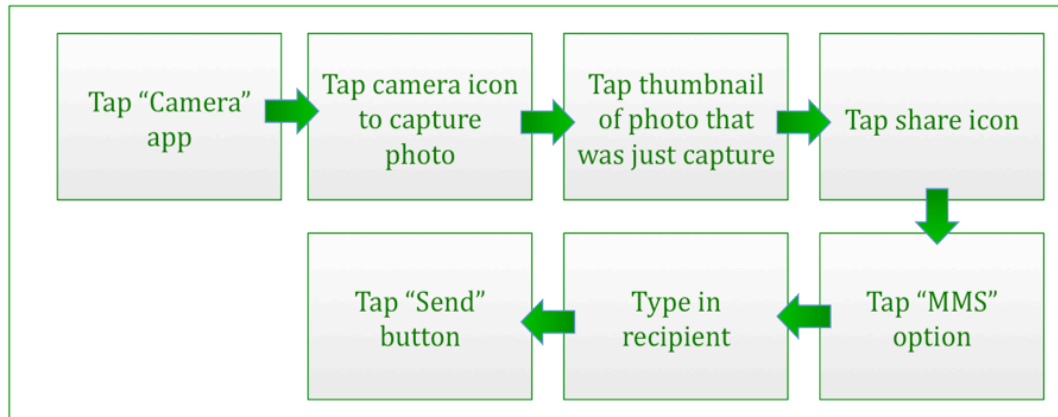
Task 0 Flow Chart



Plan 1:

1. Tap "Camera" application on the homescreen.
2. Tap camera icon to capture photo.
3. Tap thumbnail of photo that was just captured.
4. Tap share icon.
5. Tap "MMS" option.
6. Type in recipient.
7. Tap "Send" button.

Task 1 Flow Chart

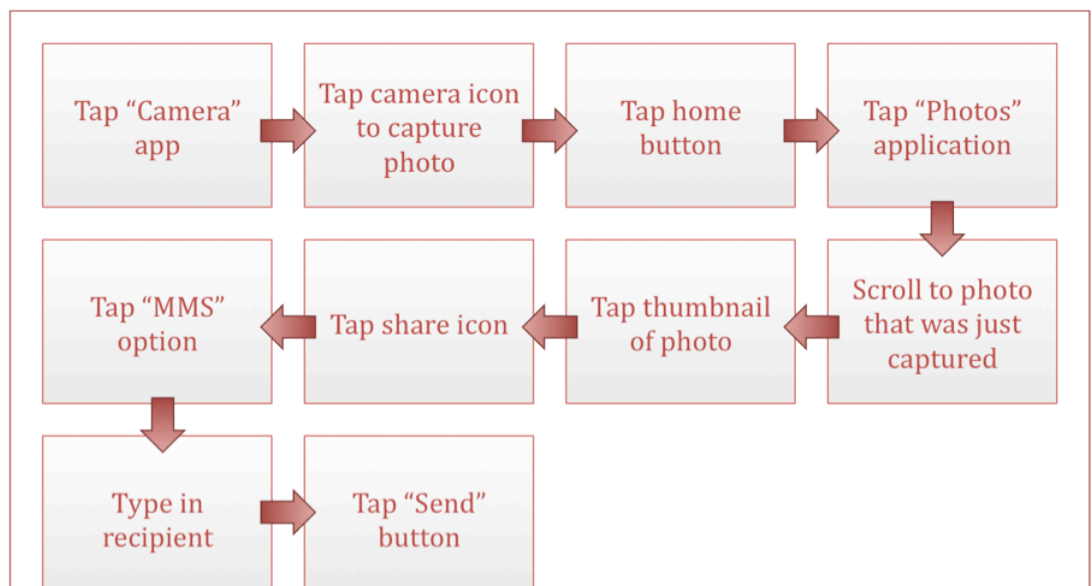


Plan 2:

1. Tap "Camera" application on the homescreen.
2. Tap camera icon to capture photo.
3. Tap home button.
4. Tap "Photos" application.
5. Scroll to photo that was just captured.
6. Tap thumbnail of photo.
7. Tap share icon.
8. Tap "MMS" option.
9. Type in recipient.

10. Tap
"Send"
button.

Task 2 Flow Chart



Analysis and Implications:

In terms of how I performed the task analysis, I think I could have been a bit clearer with my instructions. For the inexperienced subjects MMS was not a familiar term and I suspect that Subject 1 actually tapped it by accident. I should have explained what MMS was before they began the task, I simply assumed the subjects would know what it was. Also, I couldn't help but want to help the subjects that were having difficulty. Particularly the first subject, there were many instances in which I had to restrain myself from telling him how to perform the task, it was very frustrating. Although given the fact it was his first time using an iPhone, he did very well.

There were many similarities in how each of the three subjects performed the given task. One similarity was that they all immediately went to the Camera application first. This makes sense because the task was to take a picture and text/MMS is to themselves. I found it interesting that no one opted to first go to the Messages application. As you can see in Task 0 Decomposition, another way to perform this task is to start by composing a message. The fact that no one performed the task this way, including the experienced iPhone user, implies that perhaps this functionality is not very intuitive. People don't think to first compose a message, their first instinct is to take a picture.

It was interesting to see that the adult who had never used an iPhone before opted to perform the task in the same manner as the college student who was an experienced iPhone user. Task 1 Decomposition shows the flow of their actions, and the fact that both of them used this method implies it is very intuitive and simple to perform. Only one subject chose to perform the task according to Plan 2. After looking at the plan a bit more I realized that this method has the highest number of actions (10 as opposed to 8 and 7 for Plan 0 and Plan 1 respectively). As it turns out the method that was chosen by the other two subjects, Plan 1, has the fewest number of steps. This is important for a few reasons. One reason is that it shows that people want to get things done quickly, so the fewer steps or actions they have to take, the happier the user will be. iOS is known for its ease of use and exceptional user experience, and I imagine this type of analysis was done before they decided on what functionality to build into the OS.

This task analysis also made me realize that perhaps options are a good thing. Although no one performed the task according to Plan 0, if I had done the experiment with a larger number of subjects, perhaps they would have performed the task using that method. I don't think it hurts to give users options. But I can't help but think that perhaps Apple should just remove the option to take a picture from the Messages application, I know I've never used it before.